

Limit and Margin PK

Frequency (MHz)	MaxPeak (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBμV/m)
1419.000000	36.2	1000.0	1000.000	H	-23.3	37.8	74.0
1960.000000	35.1	1000.0	1000.000	H	-20.8	38.9	74.0
2946.000000	37.0	1000.0	1000.000	H	-17.2	37.0	74.0
4874.000000	47.7	1000.0	1000.000	H	-12.0	26.3	74.0
6778.000000	43.4	1000.0	1000.000	H	-9.3	30.6	74.0
9205.000000	45.1	1000.0	1000.000	H	-6.6	28.9	74.0

Limit and Margin AV

Frequency (MHz)	Average (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB/m)	Margin - AVG (dB)	Limit - AVG (dBμV/m)
1419.000000	19.8	1000.0	1000.000	H	-23.3	34.2	54.0
1960.000000	22.2	1000.0	1000.000	H	-20.8	31.8	54.0
2946.000000	24.0	1000.0	1000.000	H	-17.2	30.0	54.0
4874.000000	37.0	1000.0	1000.000	H	-12.0	17.0	54.0
6778.000000	30.0	1000.0	1000.000	H	-9.3	24.0	54.0
9205.000000	32.0	1000.0	1000.000	H	-6.6	22.0	54.0

Tested by: *Cesare Biao* Reviewed by: *Jacky Chen*
20250729 20250808

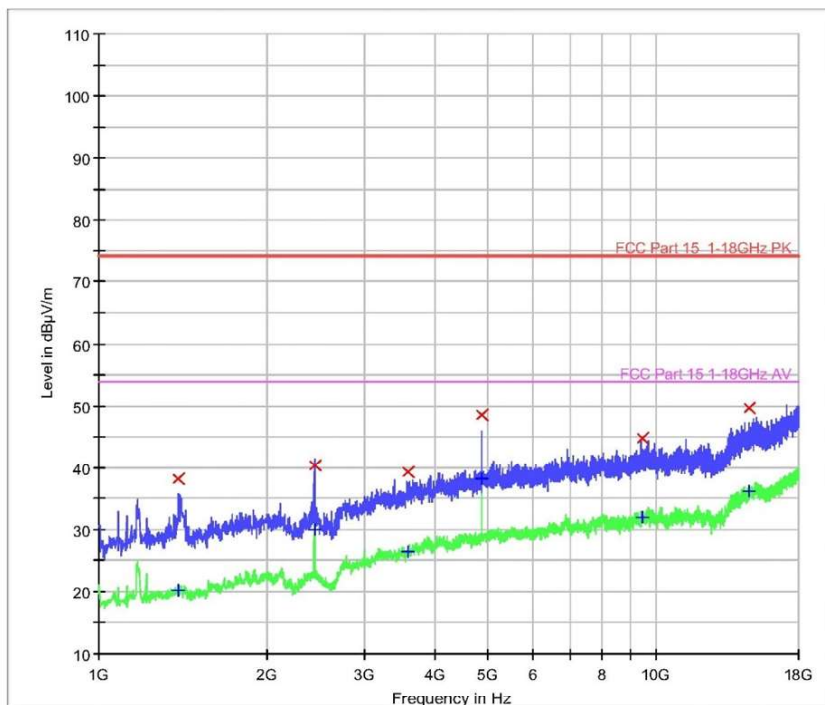
EMC Test Record (Emission)

Common Information

Manufacturer:	
Test Item:	Entertainment System
Identification:	ES503
Test Standard:	FCC Part 15
Test Detail:	Radiated Emission
Operation Mode:	TX EDR MID
Climate Condition:	26 °C, 63 %, 101kPa
Test Voltage/ Freq:	AC 120 V / 60 Hz
Receipt No:	170423584
Report No:	
Result:	Pass
Comment:	Test distance is 3m; Vertical

Subrange 1
Frequency Range: 1GHz-18GHz

EMCTT_EREFO11-A02-05_1GHz-18GHz_With PreAMP EXT



Tested by: *Cesare Gao* Reviewed by: *Jacky Chen*
20250729 20250808

Limit and Margin PK

Frequency (MHz)	MaxPeak (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBμV/m)
1393.000000	38.2	1000.0	1000.000	V	-23.4	35.9	74.0
2436.000000	40.4	1000.0	1000.000	V	-19.1	33.6	74.0
3588.000000	39.3	1000.0	1000.000	V	-15.2	34.7	74.0
4874.000000	48.5	1000.0	1000.000	V	-12.0	25.5	74.0
9460.000000	44.9	1000.0	1000.000	V	-6.6	29.1	74.0
14696.000000	49.7	1000.0	1000.000	V	-2.3	24.3	74.0

Limit and Margin AV

Frequency (MHz)	Average (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB/m)	Margin - AVG (dB)	Limit - AVG (dBμV/m)
1393.000000	20.3	1000.0	1000.000	V	-23.4	33.7	54.0
2436.000000	29.9	1000.0	1000.000	V	-19.1	24.1	54.0
3588.000000	26.5	1000.0	1000.000	V	-15.2	27.5	54.0
4874.000000	38.1	1000.0	1000.000	V	-12.0	15.9	54.0
9460.000000	32.0	1000.0	1000.000	V	-6.6	22.0	54.0
14696.000000	36.2	1000.0	1000.000	V	-2.3	17.8	54.0

Tested by: *Cesare Biao* Reviewed by: *Jacky Chen*
20250729 20250808

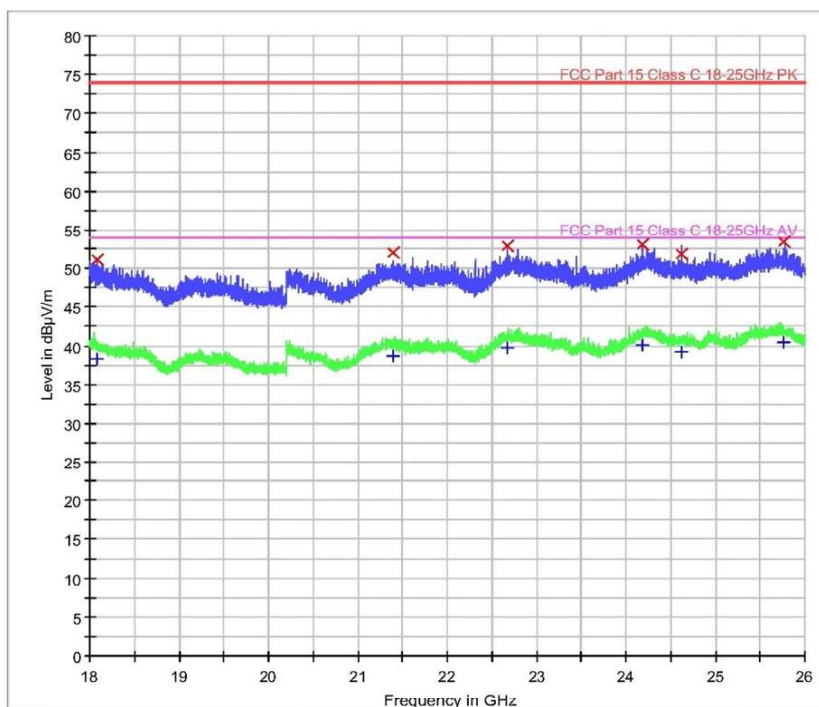
EMC Test Record (Emission)

Common Information

Manufacturer:	
Test Item:	Entertainment System
Identification:	ES503
Test Standard:	FCC Part 15
Test Detail:	Radiated Emission
Operation Mode:	TX EDR HIGH
Climate Condition:	26 °C, 63 %, 101kPa
Test Voltage/ Freq:	AC 120 V / 60 Hz
Receipt No:	170423584
Report No:	
Result:	Pass
Comment:	Test distance is 3m; Horizontal

Subrange 1
Frequency Range: 18GHz-26GHz

EMCTT_EREFO11-A02-08_18GHz-25GHz_With PreAMP EXT



Tested by: Cesare Biao
20250729

Reviewed by: Jacky Chen
20250808

Limit and Margin PK

Frequency (MHz)	MaxPeak (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBμV/m)
18080.000000	51.1	1000.0	1000.000	H	6.6	22.9	74.0
21387.000000	52.0	1000.0	1000.000	H	5.7	22.0	74.0
22674.000000	52.8	1000.0	1000.000	H	6.2	21.2	74.0
24191.000000	53.0	1000.0	1000.000	H	5.8	21.0	74.0
24621.000000	51.9	1000.0	1000.000	H	6.0	22.1	74.0
25765.000000	53.3	1000.0	1000.000	H	6.0	20.7	74.0

Limit and Margin AV

Frequency (MHz)	Average (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB/m)	Margin - AVG (dB)	Limit - AVG (dBμV/m)
18080.000000	38.4	1000.0	1000.000	H	6.6	15.6	54.0
21387.000000	38.7	1000.0	1000.000	H	5.7	15.3	54.0
22674.000000	39.7	1000.0	1000.000	H	6.2	14.3	54.0
24191.000000	40.1	1000.0	1000.000	H	5.8	13.9	54.0
24621.000000	39.2	1000.0	1000.000	H	6.0	14.8	54.0
25765.000000	40.5	1000.0	1000.000	H	6.0	13.5	54.0

Tested by: *Cesare Biao* Reviewed by: *Jacky Chen*
20250729 20250808

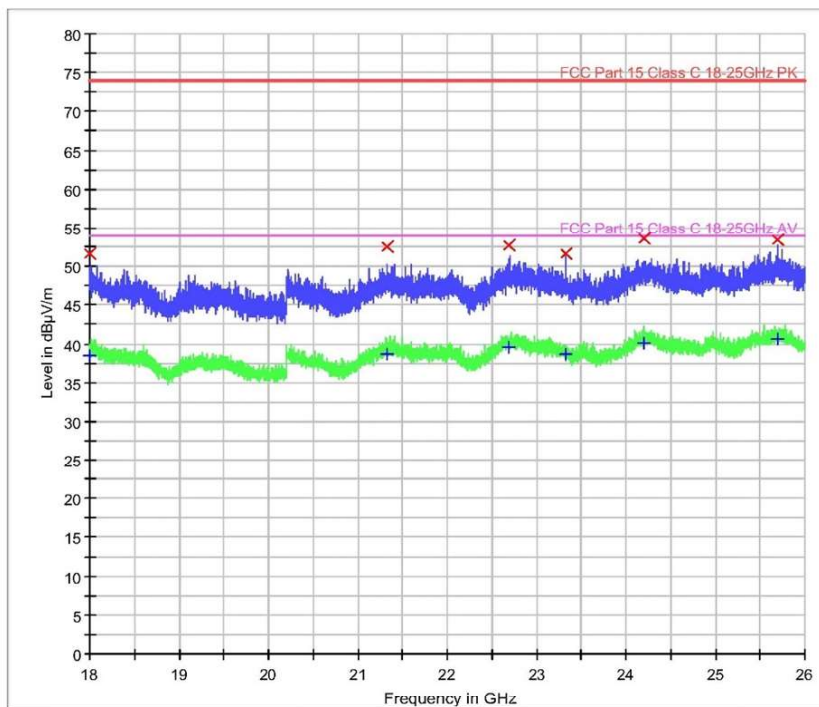
EMC Test Record (Emission)

Common Information

Manufacturer:	
Test Item:	Entertainment System
Identification:	ES503
Test Standard:	FCC Part 15
Test Detail:	Radiated Emission
Operation Mode:	TX EDR HIGH
Climate Condition:	26 °C, 63 %, 101kPa
Test Voltage/ Freq:	AC 120 V / 60 Hz
Receipt No:	170423584
Report No:	
Result:	Pass
Comment:	Test distance is 3m; Vertical

Subrange 1
Frequency Range: 18GHz-26GHz

EMCTT_EREFO11-A02-08_18GHz-25GHz_With PreAMP EXT



Tested by: *Cesare Gao*
20250729

Reviewed by: *Jacky Chen*
20250808

Limit and Margin PK

Frequency (MHz)	MaxPeak (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBμV/m)
18008.000000	51.6	1000.0	1000.000	V	6.6	22.4	74.0
21321.000000	52.4	1000.0	1000.000	V	5.7	21.6	74.0
22684.000000	52.7	1000.0	1000.000	V	6.2	21.3	74.0
23332.000000	51.6	1000.0	1000.000	V	5.7	22.4	74.0
24199.000000	53.5	1000.0	1000.000	V	5.8	20.5	74.0
25692.000000	53.5	1000.0	1000.000	V	6.0	20.5	74.0

Limit and Margin AV

Frequency (MHz)	Average (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB/m)	Margin - AVG (dB)	Limit - AVG (dBμV/m)
18008.000000	38.4	1000.0	1000.000	V	6.6	15.6	54.0
21321.000000	38.7	1000.0	1000.000	V	5.7	15.3	54.0
22684.000000	39.6	1000.0	1000.000	V	6.2	14.4	54.0
23332.000000	38.7	1000.0	1000.000	V	5.7	15.3	54.0
24199.000000	40.1	1000.0	1000.000	V	5.8	13.9	54.0
25692.000000	40.6	1000.0	1000.000	V	6.0	13.4	54.0

Tested by: *Cesare Biao* Reviewed by: *Jacky Chen*
20250729 20250808

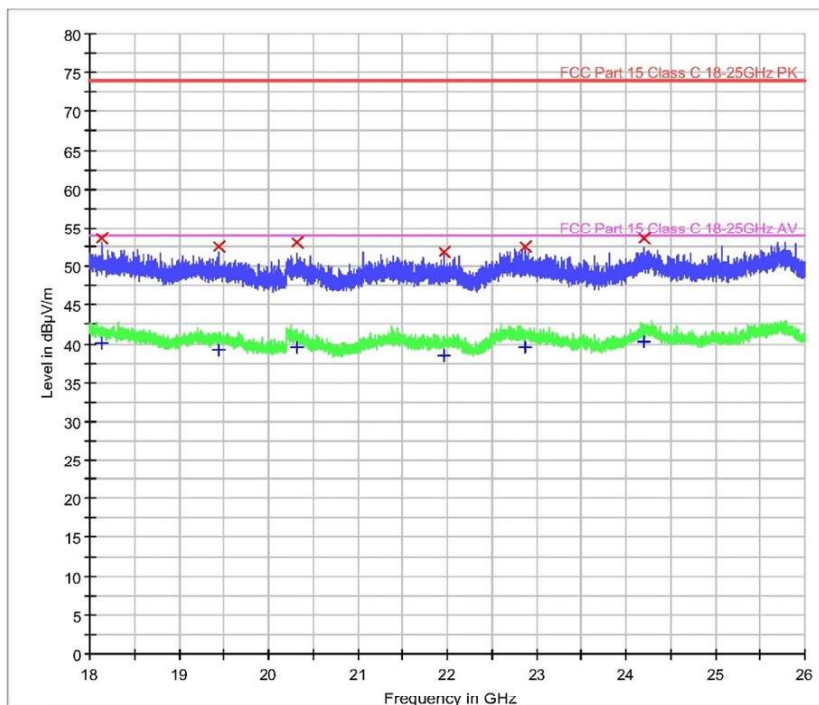
EMC Test Record (Emission)

Common Information

Manufacturer:	
Test Item:	Entertainment System
Identification:	ES503
Test Standard:	FCC Part 15
Test Detail:	Radiated Emission
Operation Mode:	TX EDR LOW
Climate Condition:	26 °C, 63 %, 101kPa
Test Voltage/ Freq:	AC 120 V / 60 Hz
Receipt No:	170423584
Report No:	
Result:	Pass
Comment:	Test distance is 3m; Horizontal

Subrange 1
Frequency Range: 18GHz-26GHz

EMCTT_EREFO11-A02-08_18GHz-25GHz_With PreAMP EXT



Tested by: *Cesare Biao* Reviewed by: *Jacky Chen*
20250729 20250808

Limit and Margin PK

Frequency (MHz)	MaxPeak (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBμV/m)
18142.000000	53.6	1000.0	1000.000	H	6.6	20.4	74.0
19448.000000	52.4	1000.0	1000.000	H	6.4	21.6	74.0
20326.000000	53.1	1000.0	1000.000	H	6.1	21.0	74.0
21970.000000	51.8	1000.0	1000.000	H	5.8	22.2	74.0
22871.000000	52.5	1000.0	1000.000	H	6.1	21.5	74.0
24203.000000	53.6	1000.0	1000.000	H	5.8	20.4	74.0

Limit and Margin AV

Frequency (MHz)	Average (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB/m)	Margin - AVG (dB)	Limit - AVG (dBμV/m)
18142.000000	40.0	1000.0	1000.000	H	6.6	14.0	54.0
19448.000000	39.2	1000.0	1000.000	H	6.4	14.8	54.0
20326.000000	39.5	1000.0	1000.000	H	6.1	14.5	54.0
21970.000000	38.5	1000.0	1000.000	H	5.8	15.5	54.0
22871.000000	39.5	1000.0	1000.000	H	6.1	14.5	54.0
24203.000000	40.3	1000.0	1000.000	H	5.8	13.7	54.0

Tested by: *Cesare Biao* Reviewed by: *Jacky Chen*
20250729 20250808

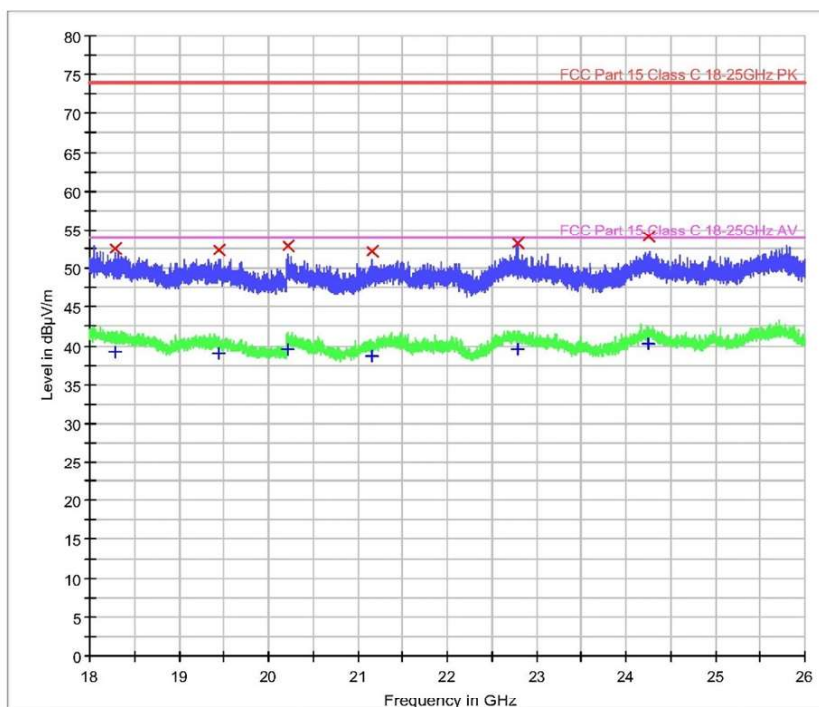
EMC Test Record (Emission)

Common Information

Manufacturer:	
Test Item:	Entertainment System
Identification:	ES503
Test Standard:	FCC Part 15
Test Detail:	Radiated Emission
Operation Mode:	TX EDR LOW
Climate Condition:	26 °C, 63 %, 101kPa
Test Voltage/ Freq:	AC 120 V / 60 Hz
Receipt No:	170423584
Report No:	
Result:	Pass
Comment:	Test distance is 3m; Vertical

Subrange 1
Frequency Range: 18GHz-26GHz

EMCTT_EREFO11-A02-08_18GHz-25GHz_With PreAMP EXT



Tested by: *Cesare Biao* Reviewed by: *Jacky Chen*
20250729 20250808

Limit and Margin PK

Frequency (MHz)	MaxPeak (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBμV/m)
18288.000000	52.5	1000.0	1000.000	V	6.6	21.6	74.0
19451.000000	52.3	1000.0	1000.000	V	6.4	21.7	74.0
20226.000000	52.8	1000.0	1000.000	V	6.1	21.2	74.0
21152.000000	52.2	1000.0	1000.000	V	5.7	21.8	74.0
22796.000000	53.3	1000.0	1000.000	V	6.1	20.8	74.0
24247.000000	54.1	1000.0	1000.000	V	5.8	19.9	74.0

Limit and Margin AV

Frequency (MHz)	Average (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB/m)	Margin - AVG (dB)	Limit - AVG (dBμV/m)
18288.000000	39.3	1000.0	1000.000	V	6.6	14.7	54.0
19451.000000	39.1	1000.0	1000.000	V	6.4	15.0	54.0
20226.000000	39.6	1000.0	1000.000	V	6.1	14.4	54.0
21152.000000	38.6	1000.0	1000.000	V	5.7	15.4	54.0
22796.000000	39.6	1000.0	1000.000	V	6.1	14.4	54.0
24247.000000	40.3	1000.0	1000.000	V	5.8	13.7	54.0

Tested by: *Cesare Biao* Reviewed by: *Jacky Chen*
20250729 20250808

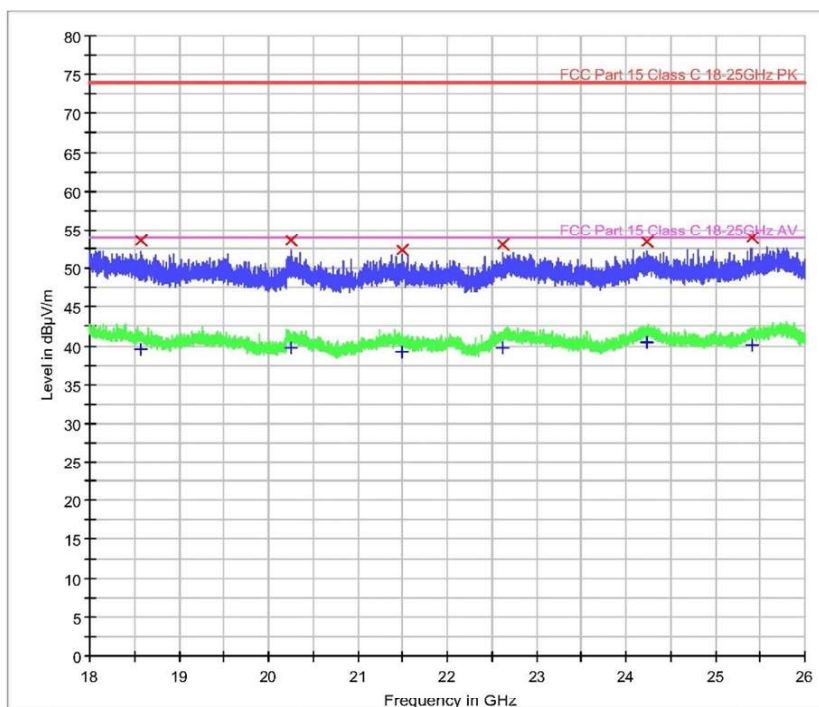
EMC Test Record (Emission)

Common Information

Manufacturer:	
Test Item:	Entertainment System
Identification:	ES503
Test Standard:	FCC Part 15
Test Detail:	Radiated Emission
Operation Mode:	TX EDR MID
Climate Condition:	26 °C, 63 %, 101kPa
Test Voltage/ Freq:	AC 120 V / 60 Hz
Receipt No:	170423584
Report No:	
Result:	Pass
Comment:	Test distance is 3m; Horizontal

Subrange 1
Frequency Range: 18GHz-26GHz

EMCTT_EREFO11-A02-08_18GHz-25GHz_With PreAMP EXT



Tested by: *Cesare Biao*
20250729

Reviewed by: *Jacky Chen*
20250808

Limit and Margin PK

Frequency (MHz)	MaxPeak (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBμV/m)
18568.000000	53.6	1000.0	1000.000	H	6.5	20.4	74.0
20260.000000	53.6	1000.0	1000.000	H	6.1	20.4	74.0
21499.000000	52.4	1000.0	1000.000	H	5.8	21.6	74.0
22629.000000	53.1	1000.0	1000.000	H	6.2	20.9	74.0
24234.000000	53.4	1000.0	1000.000	H	5.8	20.6	74.0
25413.000000	53.9	1000.0	1000.000	H	6.1	20.2	74.0

Limit and Margin AV

Frequency (MHz)	Average (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB/m)	Margin - AVG (dB)	Limit - AVG (dBμV/m)
18568.000000	39.6	1000.0	1000.000	H	6.5	14.4	54.0
20260.000000	39.8	1000.0	1000.000	H	6.1	14.3	54.0
21499.000000	39.3	1000.0	1000.000	H	5.8	14.7	54.0
22629.000000	39.8	1000.0	1000.000	H	6.2	14.3	54.0
24234.000000	40.4	1000.0	1000.000	H	5.8	13.6	54.0
25413.000000	40.1	1000.0	1000.000	H	6.1	13.9	54.0

Tested by: *Cesare Biao* Reviewed by: *Jacky Chen*
20250729 20250808

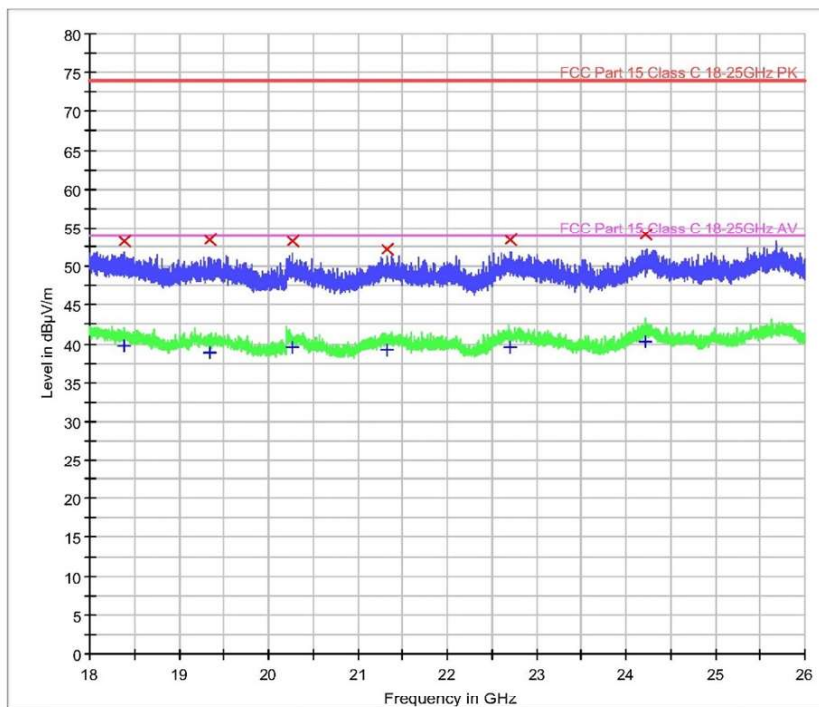
EMC Test Record (Emission)

Common Information

Manufacturer:	
Test Item:	Entertainment System
Identification:	ES503
Test Standard:	FCC Part 15
Test Detail:	Radiated Emission
Operation Mode:	TX EDR MID
Climate Condition:	26 °C, 63 %, 101kPa
Test Voltage/ Freq:	AC 120 V / 60 Hz
Receipt No:	170423584
Report No:	
Result:	Pass
Comment:	Test distance is 3m; Vertical

Subrange 1
Frequency Range: 18GHz-26GHz

EMCTT_EREFO11-A02-08_18GHz-25GHz_With PreAMP EXT



Tested by: Cesare Biao
20250729

Reviewed by: Jacky Chen
20250808

Limit and Margin PK

Frequency (MHz)	MaxPeak (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB/m)	Margin - PK+ (dB)	Limit - PK+ (dBμV/m)
18384.000000	53.2	1000.0	1000.000	V	6.6	20.8	74.0
19339.000000	53.4	1000.0	1000.000	V	6.5	20.6	74.0
20268.000000	53.3	1000.0	1000.000	V	6.1	20.8	74.0
21336.000000	52.2	1000.0	1000.000	V	5.7	21.8	74.0
22714.000000	53.4	1000.0	1000.000	V	6.2	20.6	74.0
24215.000000	54.1	1000.0	1000.000	V	5.8	19.9	74.0

Limit and Margin AV

Frequency (MHz)	Average (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Corr. (dB/m)	Margin - AVG (dB)	Limit - AVG (dBμV/m)
18384.000000	39.7	1000.0	1000.000	V	6.6	14.4	54.0
19339.000000	38.9	1000.0	1000.000	V	6.5	15.1	54.0
20268.000000	39.6	1000.0	1000.000	V	6.1	14.4	54.0
21336.000000	39.2	1000.0	1000.000	V	5.7	14.8	54.0
22714.000000	39.6	1000.0	1000.000	V	6.2	14.4	54.0
24215.000000	40.3	1000.0	1000.000	V	5.8	13.8	54.0

Tested by: *Cesare Biao* Reviewed by: *Jacky Chen*
20250729 20250808

17. Test Results of Conducted Emission on AC Mains

EMC TEST REPORT

Test Information

Manufacturer:
Test Item: Entertainment System
Identification: ES 503
Test Standard: FCC Part 15C
Test Detail: Conducted Emission
Operation Mode: Communicating
Climate Condition: 22 °C; 55 %RH; 101 kPa.
Test Voltage/ Freq.: AC 120V/ 60Hz
Port / Line: AC Mains
Receipt No.: 170423584
Report No.: /
Result: PASS
Comment: /

Level Unit: dBμV

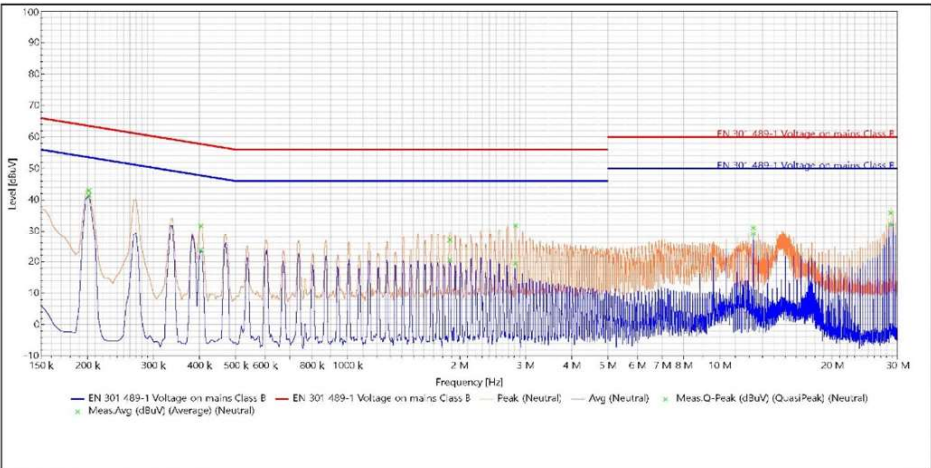
Subrange	Detectors	IF Bandwidth	Step Size	Meas. Time	Receiver
150kHz - 30MHz	Peak; Average	9kHz	4 kHz	10ms	ESW 8

Tested by: *Mark Luo* 20250723

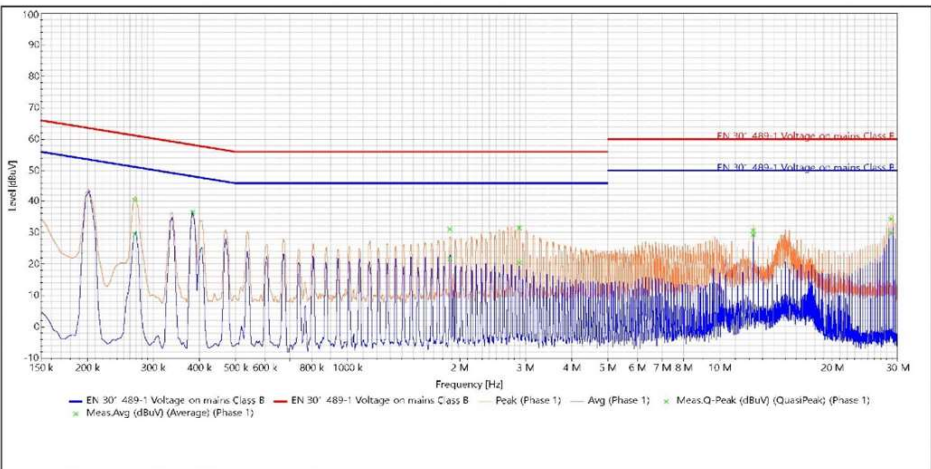
Approved by: *Jason Wu* 20250804

1 Graph by Position

Position Name : Neutral



Position Name : Phase 1



2 Finals

Final source : QuasiPeak

Frequency	SR #	Meas.Q-Peak (dBuV)	Limit (dBuV)	Meas.-Lim (dB)	Line	RBW (Hz)	Meas.Time (s)	Comments	Correction (dB)
201.55 kHz	1	43.006	63.528	-20.522	Neutral	9000	1	Pass	9.882
403.119 kHz	1	31.738	57.812	-26.074	Neutral	9000	1	Pass	9.896
1.882449 MHz	1	26.943	56	-29.057	Neutral	9000	1	Pass	9.979
2.82299 MHz	1	31.847	56	-24.153	Neutral	9000	1	Pass	9.979
12.28825 MHz	1	31.072	60	-28.928	Neutral	9000	1	Pass	10.244
28.79993 MHz	1	35.826	60	-24.174	Neutral	9000	1	Pass	10.479

Final source : Average

Frequency	SR #	Meas.Avg (dBuV)	Limit (dBuV)	Meas.-Lim (dB)	Line	RBW (Hz)	Meas.Time (s)	Comments	Correction (dB)
201.55 kHz	1	41.462	53.528	-12.065	Neutral	9000	1	Pass	9.882
403.119 kHz	1	23.757	47.812	-24.055	Neutral	9000	1	Pass	9.896
1.882449 MHz	1	20.548	46	-25.452	Neutral	9000	1	Pass	9.979
2.82299 MHz	1	19.47	46	-26.53	Neutral	9000	1	Pass	9.979
12.28825 MHz	1	29.028	50	-20.972	Neutral	9000	1	Pass	10.244
28.79993 MHz	1	32.082	50	-17.918	Neutral	9000	1	Pass	10.479

3 Finals

Final source : QuasiPeak

Frequency	SR #	Meas.Q-Peak (dBuV)	Limit (dBuV)	Meas.-Lim (dB)	Line	RBW (Hz)	Meas.Time (s)	Comments	Correction (dB)
268.109 kHz	2	40.253	61.118	-20.865	Phase 1	9000	1	Pass	9.849
383.709 kHz	2	36.486	58.236	-21.749	Phase 1	9000	1	Pass	9.86
1.882219 MHz	2	31.028	56	-24.972	Phase 1	9000	1	Pass	9.961
2.88973 MHz	2	31.435	56	-24.565	Phase 1	9000	1	Pass	9.991
12.28802 MHz	2	30.608	60	-29.392	Phase 1	9000	1	Pass	10.209
28.80155 MHz	2	34.254	60	-25.746	Phase 1	9000	1	Pass	10.453

Final source : Average

Frequency	SR #	Meas.Avg (dBuV)	Limit (dBuV)	Meas.-Lim (dB)	Line	RBW (Hz)	Meas.Time (s)	Comments	Correction (dB)
268.109 kHz	2	29.399	51.118	-21.719	Phase 1	9000	1	Pass	9.849
383.709 kHz	2	36.493	48.236	-11.743	Phase 1	9000	1	Pass	9.86
1.882219 MHz	2	21.65	46	-24.35	Phase 1	9000	1	Pass	9.961
2.88973 MHz	2	20.363	46	-25.637	Phase 1	9000	1	Pass	9.991
12.28802 MHz	2	29.23	50	-20.77	Phase 1	9000	1	Pass	10.209
28.80155 MHz	2	29.795	50	-20.205	Phase 1	9000	1	Pass	10.453